



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

2020 COST RECOVERY STUDY

Prepared by the staff of the
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA

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Executive Summary

The 2020 Cost Recovery Study includes the latest fee-related cost and revenue data gathered for FYE 2019 (i.e., July 1, 2018 - June 30, 2019). The results of this 2020 Cost Recovery Study will be used as a tool in the preparation of the FYE 2021 budget, and for evaluating potential amendments to the Air District's Regulation 3: Fees.

The completed cost recovery analysis indicates that in FYE 2019 there continued to be a revenue shortfall, as overall direct and indirect costs of regulatory programs exceeded fee revenue (see Figure 2). For FYE 2017 to 2019, the Air District is recovering approximately 84 percent of its fee-related activity costs (see Figure 3). The overall magnitude of this cost recovery gap was determined to be approximately \$8.4 million. This cost recovery gap was filled using General Fund revenue received by the Air District from the counties' property tax revenue.

The 2020 Cost Recovery Study also addressed fee-equity issues by analyzing whether there is a revenue shortfall at the individual Fee Schedule level. It was noted that of the twenty-three Fee Schedules for which cost recovery could be analyzed, seven of the component Fee Schedules had fee revenue contributions exceeding total cost.

Background

The Air District is responsible for protecting public health and the environment by achieving and maintaining health-based national and state ambient air quality standards, and reducing public exposure to toxic air contaminants, in the nine-county Bay Area region. Fulfilling this task involves reducing air pollutant emissions from sources of regulated air pollutants and maintaining these emission reductions over time. In accordance with State law, the Air District's primary regulatory focus is on stationary sources of air pollution.

The Air District has defined units for organizational purposes (known as "Programs") to encompass activities which are either dedicated to mission-critical "direct" functions, such as permitting, rule-making, compliance assurance, sampling and testing, grant distribution, etc., or are primarily dedicated to support and administrative "indirect" functions. The Air District has also defined revenue source categories (known as "Billing Codes") for the permit fee schedules, grant revenue sources, and general support activities.

The Air District's air quality regulatory activities are primarily funded by revenue from regulatory fees, government grants and subventions, and county property taxes. Between 1955 and 1970, the Air District was funded entirely through property taxes. In 1970, the California Air Resources Board (CARB) and U.S. Environmental Protection Agency began providing grant funding to the Air District. After the passage of Proposition 13, the Air District qualified as a "special district" and became eligible for AB-8 funds, which currently make up the county revenue portion of the budget.

State law authorizes the Air District to impose a schedule of fees to generate revenue to recover the costs of activities related to implementing and enforcing air quality programs.

On a regular basis, the Air District has considered whether these fees result in the collection of a sufficient and appropriate amount of revenue in comparison to the cost of related program activities.

In 1999, a comprehensive review of the Air District's fee structure and revenue was completed by the firm KPMG Peat Marwick LLP (*Bay Area Air Quality Management District Cost Recovery Study, Final Report: Phase One – Evaluation of Fee Revenues and Activity Costs; February 16, 1999*). The Study recommended an activity-based costing model, which has been implemented. Also, as a result of that Study, the Air District implemented a time-keeping system. These changes improved the Air District's ability to track costs by program activities. The 1999 Cost Recovery Study indicated that fee revenue did not offset the full costs of program activities associated with sources subject to fees as authorized by State law. Property tax revenue (and in some years, fund balances) have been used to close this gap.

In 2004, the Air District's Board of Directors approved funding for an updated Cost Recovery Study that was conducted by the accounting/consulting firm Stonefield Josephson, Inc. (*Bay Area Air Quality Management District Cost Recovery Study, Final Report; March 30, 2005*). This Cost Recovery Study analyzed data collected during the three-year period FYE 2002 through FYE 2004. It compared the Air District's costs of program activities to the associated fee revenues and analyzed how these costs are apportioned amongst the fee-payers. The Study indicated that a significant cost recovery gap existed. The results of this 2005 report and subsequent internal cost recovery studies have been used by the Air District in its budgeting process, and to set various fee schedules.

In March 2011, another study was completed by the Matrix Consulting Group (*Cost Recovery and Containment Study, Bay Area Air Quality Management District, Final Report; March 9, 2011*). The purpose of this Cost Recovery and Containment Study was to provide the Air District with guidance and opportunities for improvement regarding its organization, operation, and cost recovery/allocation practices. A Cost Allocation Plan was developed and implemented utilizing FYE 2010 expenditures. This Study indicated that overall, the Air District continued to under-recover the costs associated with its fee-related services. In order to reduce the cost recovery gap, further fee increases were recommended for adoption over a period of time in accordance with a Cost Recovery Policy to be adopted by the Air District's Board of Directors. Also, Matrix Consulting Group reviewed and discussed the design and implementation of the new Production System which the Air District is developing in order to facilitate cost containment through increased efficiency and effectiveness.

Air District staff initiated a process to develop a Cost Recovery Policy in May 2011, and a Stakeholder Advisory Group was convened to provide input in this regard. A Cost Recovery Policy was adopted by the Air District's Board of Directors on March 7, 2012. This policy specifies that the Air District should amend its fee regulation, in conjunction with the adoption of budgets for Fiscal Year Ending (FYE) 2014 through FYE 2018, in a manner sufficient to increase overall recovery of regulatory program activity costs to 85%. The policy also indicates that amendments to specific fee schedules should continue to be made in consideration of cost recovery analyses conducted at the fee

schedule-level, with larger increases being adopted for the schedules that have the larger cost recovery gaps.

In February 2018, the Matrix Consulting Group completed an update of the 2011 cost recovery and containment study for the fiscal year that ended June 30, 2017. The primary purpose of this Study was to evaluate the indirect overhead costs associated with the Air District and the cost recovery associated with the fees charged, by the Air District. The project team evaluated the Air District's FYE 2017 Programs to assess their classification as "direct" or "indirect". In addition, they audited the time tracking data associated with each of the different fee schedules. The Study provided specific recommendations related to direct and indirect cost recovery for the Air District, as well as potential cost efficiencies.

This 2018 Cost Recovery Study incorporated the accounting methodologies developed by KPMG in 1999, Stonefield Josephson, Inc. in 2005 and Matrix Consulting Group in 2011. The Study included the latest cost and revenue data gathered for FYE 2017 (i.e., July 1, 2016 - June 30, 2017). The results of the 2018 Cost Recovery Study were used as a tool in the preparation of the budgets for FYE 2019 and FYE 2020, and for evaluating potential amendments to the Air District's Regulation 3: Fees.

Legal Authority

In the post-Prop 13 era, the State Legislature determined that the cost of programs to address air pollution should be borne by the individuals and businesses that cause air pollution through regulatory and service fees. The primary authority for recovering the cost of Air District programs and activities related to stationary sources is given in Section 42311 of the Health and Safety Code (HSC), under which the Air District is authorized to:

- Recover the costs of programs related to permitted stationary sources
- Recover the costs of programs related to area-wide and indirect sources of emissions which are regulated, but for which permits are not issued
- Recover the costs of certain hearing board proceedings
- Recover the costs related to programs that regulate toxic air contaminants

The measure of the revenue that may be recovered through stationary source fees is the full cost of all activities related to these sources, including all direct Program costs and a commensurate share of indirect Program costs. Such fees are valid so long as they do not exceed the reasonable cost of the service or regulatory program for which the fee is charged, and are apportioned amongst fee payers such that the costs allocated to each fee-payer bears a fair or reasonable relationship to its burden on, and benefits from, the regulatory system.

Air districts have restrictions in terms of the rate at which permit fees may be increased. Under HSC Section 41512.7, permit fees may not be increased by more than 15 percent on a facility in any calendar year.

Study Methodology

The methodology for determining regulatory program revenue and costs is summarized as follows:

Revenue

Revenue from all permit renewals and applications during the FYE 2019 was assigned to the appropriate Permit Fee Schedules. This is a continued improvement over prior years' process due to the more detailed data available in the New Production System.

Costs

Costs are expenditures that can be characterized as being either direct or indirect. Direct costs can be identified specifically with a particular program activity. Direct costs include wages and benefits, operating expenses, and capital expenditures used in direct support of the particular activities of the Air District (e.g., permit-related activities, grant distribution, etc.).

Indirect costs are those necessary for the general operation of the Air District as a whole. Often referred to as "overhead", these costs include accounting, finance, human resources, facility costs, information technology, executive management, etc. Indirect costs are allocated to other indirect Programs, using the reciprocal (double-step down) method, before being allocated to direct Programs.

Employee work time is tracked by the hour, or fraction thereof, using both Program and Billing Code detail. This time-keeping system allows for the capture of all costs allocatable to a revenue source on a level-of-effort basis.

Employee work time is allocated to activities within Programs by billing codes (BC1-BC99), only two of which indicate general support. One of these two general support codes (BC8) is identified with permitting activities of a general nature, not specifically related to a particular Fee Schedule.

Operating and capital expenses are charged through the year to each Program, as incurred. In cost recovery, these expenses, through the Program's Billing Code profile, are allocated on a pro-rata basis to each Program's revenue-related activity. For example, employees working in grant Programs (i.e., Smoking Vehicle, Mobile Source Incentive Fund, etc.) use specific billing codes (i.e., BC3, BC17, etc.), and all operating/capital expense charges are allocated pro-rata to those grant activities. Employees working in permit-related Programs (i.e., Air Toxics, Compliance Assurance, Source Testing, etc.) also use specific billing codes (i.e., BC8, BC21, BC29, etc.) and all operating/capital expense charges incurred by those Programs are allocated pro-rata to those Program's activity profiles as defined by the associated billing codes.

Direct costs for permit activities include personnel, operating and capital costs based on employee work time allocated to direct permit-related activities, and to general permit-related support and administrative activities (allocated on pro-rata basis). Indirect costs

for permit activities include that portion of general support personnel, operating and capital costs allocated pro-rata to permit fee revenue-related program activities.

Study Results

Figure 1 shows a summary of overall regulatory program costs and revenue for FYE 2019. Figure 2 shows the details of costs and revenue on a fee schedule basis for FYE 2019 by schedule. Figure 3 shows the details of average schedule costs and revenue for the three-year period FYE 2017 through FYE 2019 by schedule.

Discussion of Results

Figure 1 indicates that in FYE 2019 there continued to be a revenue shortfall, as the direct and indirect costs of regulatory programs exceeded fee revenue. The overall magnitude of the cost recovery gap was determined to be \$7.9 million for FYE 2019. This cost recovery gap was filled by General Fund revenue received by the Air District from the counties.

Figure 2 shows that in FYE 2019 there were revenue shortfalls for most of the twenty-three fee schedules for which cost recovery can be analyzed. For FYE 2019, the Air District is recovering approximately 86% of its fee-related activity costs. The revenue collected exceeded Program costs for seven fee schedules. These are Schedule B (Combustion of Fuels), Schedule C (Stationary Containers for the Storage of Organic Liquids), Schedule D (Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals), Schedule G-5 (Miscellaneous Sources), Schedule L (Asbestos Operations), Schedule R (Equipment Registration Fees), and Schedule X (Community Air Monitoring). The revenue collected was less than program costs for 16 fee schedules. These are Schedule A (Hearing Board), Schedule E (Solvent Evaporating Sources), Schedule F (Miscellaneous Sources), Schedule G-1 (Miscellaneous Sources), Schedule G-2 (Miscellaneous Sources), Schedule G-3 (Miscellaneous Sources), Schedule G-4 (Miscellaneous Sources), Schedule H (Semiconductor and Related Operations), Schedule I (Dry Cleaners), Schedule K (Solid Waste Disposal Sites), Schedule N (Toxic Inventory Fees), Schedule P (Major Facility Review Fees), Schedule S (Naturally Occurring Asbestos Operations), Schedule T (Greenhouse Gas Fees), Schedule V (Open Burning), and Schedule W (Refinery Emissions Tracking),.

Figure 3 shows that over a three-year period (FYE 2017 through FYE 2019) there were revenue shortfalls for most of the twenty-three fee schedules for which cost recovery can be analyzed. For this three-year period, the Air District is recovering approximately 84% of its fee-related activity costs. The revenue collected exceeded costs for five fee schedules. These are Schedule B (Combustion of Fuel), Schedule C (Stationary Containers for the Storage of Organic Liquids), Schedule G-5 (Miscellaneous Sources), Schedule L (Asbestos Operations), and Schedule X (Community Air Monitoring). The revenue collected was lower than costs for 18 fee schedules. These are Schedule A (Hearing Board), Schedule D (Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals), Schedule E (Solvent Evaporating Sources), Schedule F (Miscellaneous Sources), Schedule G-1 (Miscellaneous Sources), Schedule G-2 (Miscellaneous Sources), Schedule G-3 (Miscellaneous Sources), Schedule G-4 (Miscellaneous Sources), Schedule H (Semiconductor and Related Operations),

Schedule I (Dry Cleaners), Schedule K (Solid Waste Disposal Sites), Schedule N (Toxic Inventory Fees), Schedule P (Major Facility Review Fees), Schedule R (Equipment Registration Fees), Schedule S (Naturally Occurring Asbestos Operations), Schedule T (Greenhouse Gas Fees), Schedule V (Open Burning), and Schedule W (Refinery Emissions Tracking).

The Air District uses the three-year averages shown in Figure 3 in evaluating proposed amendments to Regulation 3, Fees at the fee schedule level because longer averaging periods are less sensitive to year-to-year variations in activity levels that occur due to economic or market variations and regulatory program changes affecting various source categories.

Conclusions

Air District staff has updated the analysis of cost recovery of its regulatory programs based on the methodology established by the accounting firms KPMG in 1999 and Stonefield Josephson, Inc. in 2005 and updated by Matrix Consulting Group in 2011 and in 2018. The analysis shows that fee revenue continues to fall short of recovering activity costs. For FYE 2017 to 2019, the Air District is recovering approximately 84% of its fee-related activity costs. The overall magnitude of this cost recovery gap was determined to be approximately \$8.4 million.

To reduce or stabilize expenditures, the Air District has implemented various types of cost containment strategies, including developing an online permitting system for high-volume source categories, maintaining unfilled positions when feasible, and reducing service and supply budgets. In order to reduce the cost recovery gap, further fee increases will need to be evaluated in accordance with the Cost Recovery Policy adopted by the Air District's Board of Directors.



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FIGURES

Figure 1: Total Permit Fee Revenue, Costs and Gap for FYE 2019

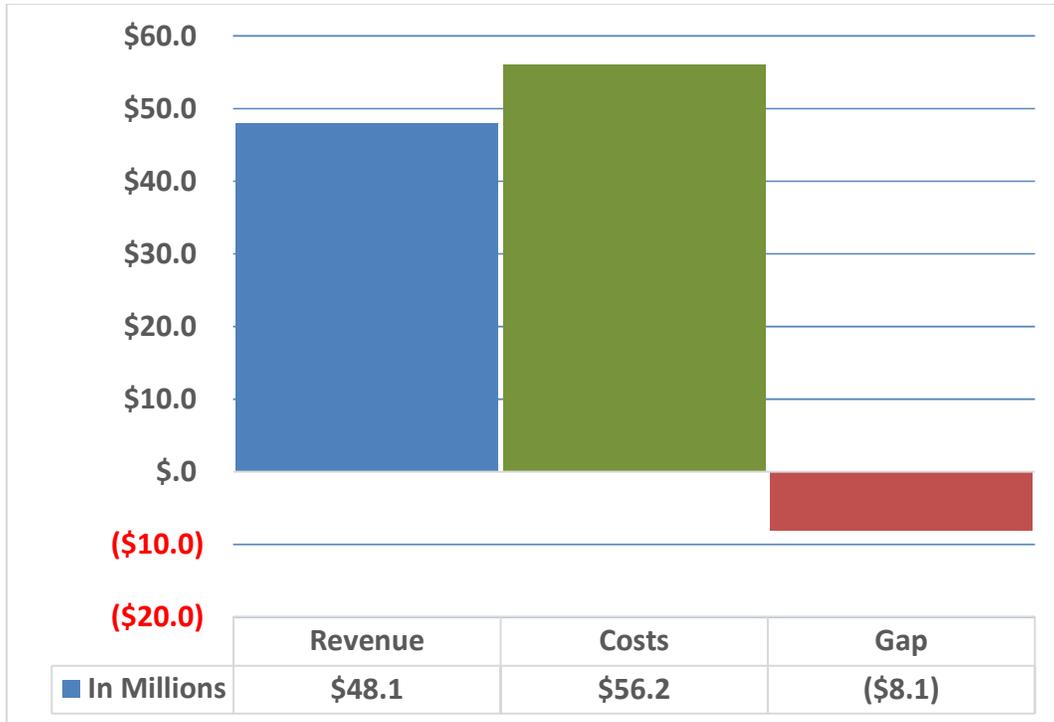


Figure 2: Fee Revenue and Program Costs by Fee Schedule, FYE 2019

	A-Hearing Board	B - Combustion of Fuel	C - Storage Organic Liquid	D - Gasoline Dispensing / Bulk Terminals	E - Solvent Evaporation	F - Miscellaneous	G1 - Miscellaneous	G2 - Miscellaneous	G3 - Miscellaneous	G4 - Miscellaneous	G5 - Miscellaneous	H - Semiconductor	I - Drycleaners	K - Waste Disposal	L - Asbestos	N - Toxic Inventory (AB2588)	P - Major Facility Review (Title V)	R-Registration	S - Naturally Occurring Asbestos	T - GreenHouse Gas	V - Open Burning	W - Refinery Emissions Tracking	X - Community Air Monitoring	Total	
Revenues	47,628	7,679,636	2,233,077	6,249,199	3,200,202	2,102,701	2,637,196	761,955	656,420	1,527,227	647,983	184,622	4,498	177,413	5,057,006	263,358	5,638,883	336,060	100,513	2,963,989	211,132	139,905	933,739	43,754,341	
Schedule M	-	880,691	109,905	12,636	39,061	267,090	60,344	17,111	6,668	755,273	14,796	-	-	123,213	-	-	-	592	-	-	-	-	-	-	2,287,380
Reg 3- 312 - Bubble	-	197,342	302,807	15,038	19,286	101,639	96,373	36,772	28,545	22,542	23,063	-	-	329	-	-	-	1,547	-	-	-	-	-	-	845,282
Reg 3- 327 - Renewal Processing	-	459,251	47,484	227,953	202,246	140,586	45,833	8,221	1,149	544	806	6,265	2,195	4,153	-	-	-	13,064	-	-	-	-	-	-	1,159,751
Reg 3- 311 - Banking	-	27,318	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27,318
Total Revenue	47,628	9,244,239	2,693,273	6,504,826	3,460,795	2,612,016	2,839,747	824,058	692,782	2,305,587	686,648	190,887	6,693	305,109	5,057,006	263,358	5,638,883	351,262	100,513	2,963,989	211,132	139,905	933,739	48,074,073	
Direct Costs																									
Direct Labor	67,327	4,951,822	447,138	3,423,477	2,725,197	1,782,297	3,621,802	1,033,054	467,078	1,778,054	215,908	161,040	4,238	1,753,926	1,410,266	491,786	3,369,463	146,277	383,252	1,290,338	390,970	328,888	111,697	30,355,293	
Services and Supplies	3,848	379,147	28,953	279,042	182,076	120,927	293,144	92,450	38,213	183,018	14,853	10,362	275	127,296	58,859	26,394	284,528	4,805	28,943	1,272,092	18,527	27,000	21,914	3,496,666	
Capital Outlay	0	579,062	53,363	399,066	326,431	212,485	415,586	117,470	55,410	207,326	25,134	19,387	501	209,089	8,198	55,698	392,886	701	45,591	148,906	638	41,542	16,806	3,331,277	
Indirect Costs	36,534	3,029,925	275,540	2,061,635	1,707,535	1,072,870	2,218,968	638,292	296,327	1,105,686	138,277	100,276	1,949	1,114,653	964,944	270,820	1,989,325	98,405	251,662	752,107	272,501	201,766	72,791	18,672,787	
Total Costs	107,708	8,939,955	804,994	6,163,220	4,941,239	3,188,579	6,549,500	1,881,266	857,029	3,274,084	394,172	291,065	6,962	3,204,965	2,442,267	844,698	6,036,202	250,189	709,447	3,463,443	682,636	599,195	223,207	55,856,023	
Net Surplus/(Deficit)	(60,081)	304,283	1,888,278	341,606	(1,480,444)	(576,563)	(3,709,753)	(1,057,208)	(164,247)	(968,497)	292,477	(100,178)	(269)	(2,899,856)	2,614,739	(581,340)	(397,319)	101,073	(608,934)	(499,454)	(471,504)	(459,290)	710,532	(7,781,950)	
Cost Recovery	44.2%	103.4%	334.6%	105.5%	70.0%	81.9%	43.4%	43.8%	80.8%	70.4%	174.2%	65.6%	96.1%	9.5%	207.1%	31.2%	93.4%	140.4%	14.2%	85.6%	30.9%	23.3%	418.3%	86.07%	

Figure 3: Fee Revenue and Program Costs by Fee Schedule, FYE 2017-2019, 3-Year Average

	A-Hearing Board	B - Combustion of Fuel	C - Storage Organic Liquid	D - Gasoline Dispensing / Bulk Terminals	E - Solvent Evaporation	F - Miscellaneous	G1 - Miscellaneous	G2 - Miscellaneous	G3 - Miscellaneous	G4 - Miscellaneous	G5 - Miscellaneous	H - Semiconductor	I - Drycleaners	K - Waste Disposal	L - Asbestos	N - Toxic Inventory (AB2588)	P - Major Facility Review (Title V)	R-Registration	S - Naturally Occurring Asbestos	T - GreenHouse Gas	V - Open Burning	W - Refinery Emissions Tracking	X - Community Air Monitoring	Total	
Revenues	22,923	7,920,402	2,189,106	5,736,757	2,823,092	1,982,551	2,481,798	650,061	635,241	1,210,547	718,798	168,356	4,454	159,372	4,387,279	268,240	5,397,772	278,599	91,026	2,629,967	177,519	201,285	1,038,541	41,173,687	
Schedule M	0	676,296	205,639	32,594	31,872	753,812	84,019	13,837	4,129	258,966	120,150	0	0	112,147	0	0	0	1,441	0	0	0	0	0	0	2,294,901
Reg 3- 312 - Bubble	0	382,759	182,101	21,304	12,701	43,794	45,413	18,158	13,141	64,204	13,078	201	4,537	110	0	0	0	558	0	0	0	0	0	0	802,058
Reg 3- 327 - Renewal Processing	0	318,734	44,762	219,539	211,637	145,415	46,920	7,895	1,006	1,022	1,056	5,885	1,806	4,228	0	0	0	8,559	0	0	0	0	0	0	1,018,464
Reg 3- 311 - Banking	0	13,312	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,312
Total Revenue	22,923	9,311,503	2,621,608	6,010,195	3,079,302	2,925,573	2,658,149	689,950	653,516	1,534,739	853,082	174,442	10,798	275,857	4,387,279	268,240	5,397,772	289,158	91,026	2,629,967	177,519	201,285	1,038,541	45,302,422	
Direct Costs																									
Direct Labor	87,863	5,207,508	408,889	3,776,161	2,392,210	1,693,044	3,366,754	752,538	413,754	1,795,291	205,756	175,929	8,628	1,253,014	1,386,782	288,379	3,518,663	199,071	275,024	1,577,642	334,785	276,526	197,033	29,591,245	
Services and Supplies	3,222	394,927	22,228	332,682	149,335	145,450	262,324	65,327	29,638	216,275	12,012	8,826	394	88,231	109,172	17,486	340,749	10,928	20,491	582,878	32,483	23,761	24,181	2,893,001	
Capital Outlay	0	482,898	32,210	346,812	204,803	146,233	394,677	70,623	38,133	220,071	15,075	12,722	2,510	135,886	153,306	23,994	318,018	1,347	29,922	178,994	3,779	41,803	24,878	2,878,694	
Indirect Costs	52,344	3,161,086	258,496	2,296,770	1,513,246	998,097	2,057,059	450,666	267,299	1,056,336	134,506	110,872	5,265	802,166	1,098,563	164,659	2,072,453	163,066	180,016	924,193	279,575	165,118	121,449	18,333,302	
Total Costs	143,428	9,246,418	721,823	6,752,424	4,259,595	2,982,824	6,080,815	1,339,155	748,824	3,287,973	367,350	308,350	16,798	2,279,298	2,747,823	494,517	6,249,883	374,413	505,453	3,263,707	650,623	507,208	367,541	53,696,241	
Total Surplus/(Deficit)	(120,505)	65,084	1,899,786	(742,229)	(1,180,293)	(57,252)	(3,422,665)	(649,205)	(95,308)	(1,753,234)	485,732	(133,907)	(6,000)	(2,003,441)	1,639,456	(226,278)	(852,111)	(85,255)	(414,427)	(633,740)	(473,104)	(305,923)	671,001	(8,393,819)	
Cost Recovery	16%	101%	363%	89%	72%	98%	44%	52%	87%	47%	232%	57%	64%	12%	160%	54%	86%	77%	18%	81%	27%	40%	283%	84.37%	